

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

**MORPHOMETRIC:**

Lake: MILLER POND	Lake Area (ha): 16.27
Town: GRANTHAM	Maximum depth (m): 2.2
County: Sullivan	Mean depth (m): 1.3
River Basin: Connecticut	Volume (m <sup>3</sup> ): 218500
Latitude: 43°32'25" N	Relative depth: 0.5
Longitude: 72°10'05" W	Shore configuration: 1.26
Elevation (ft): 1425	Areal water load (m/yr): 11.86
Shore length (m): 1800	Flushing rate (yr <sup>-1</sup> ): 8.80
Watershed area (ha): 444.2	P retention coeff.: 0.53
% watershed ponded: 1.4	Lake type: natural w/dam

**BIOLOGICAL:**

27 February 1992

26 August 1991

DOM. PHYTOPLANKTON (% TOTAL)	#1	NO PHYTOPLANKTON	LYNGBYA 95%
	#2	SAMPLES COLLECTED	
	#3		
PHYTOPLANKTON ABUNDANCE (cells/mL)			4250
CHLOROPHYLL-A (µg/L)			3.30
DOM. ZOOPLANKTON (% TOTAL)	#1	NO ZOOPLANKTON	KERATELLA 22%
	#2	SAMPLES COLLECTED	POLYARTHRA 22%
	#3		NAUPLIUS LARVAE 17%
ROTIFERS/LITER			680
MICROCRUSTACEA/LITER			288
ZOOPLANKTON ABUNDANCE (#/L)			1046
VASCULAR PLANT ABUNDANCE			Abundant
SECCHI DISK TRANSPARENCY (m)			2.1 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		9.5	8.7
BACTERIA (fecal col., #/100 ml)	#1		10
	#2		< 10
	#3		

**SUMMER THERMAL STRATIFICATION:**

not stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>): None  
Anoxic volume (m<sup>3</sup>): None

**CHEMICAL:**

Lake: MILLER POND

Town: GRANTHAM

	27 February 1992		26 August 1991		
DEPTH (m)	1.5		1.5		
pH (units)	6.0		6.7		
A.N.C. (Alkalinity)	4.2		2.8		
NITRATE NITROGEN	0.12		< 0.05		
TOTAL KJELDAHL NITROGEN					
TOTAL PHOSPHORUS	0.003		0.013		
CONDUCTIVITY ( $\mu$ mhos/cm)	31.7		23.0		
APPARENT COLOR (cpu)	9		18		
MAGNESIUM			0.37		
CALCIUM			2.1		
SODIUM			< 1.0		
POTASSIUM			< 0.40		
CHLORIDE	< 3		< 2		
SULFATE	7		5		
TN : TP					
CALCITE SATURATION INDEX			3.8		

All results in mg/L unless indicated otherwise

**TROPHIC CLASSIFICATION: 1991**

D.O. S.D. PLANT CHL TOTAL CLASS

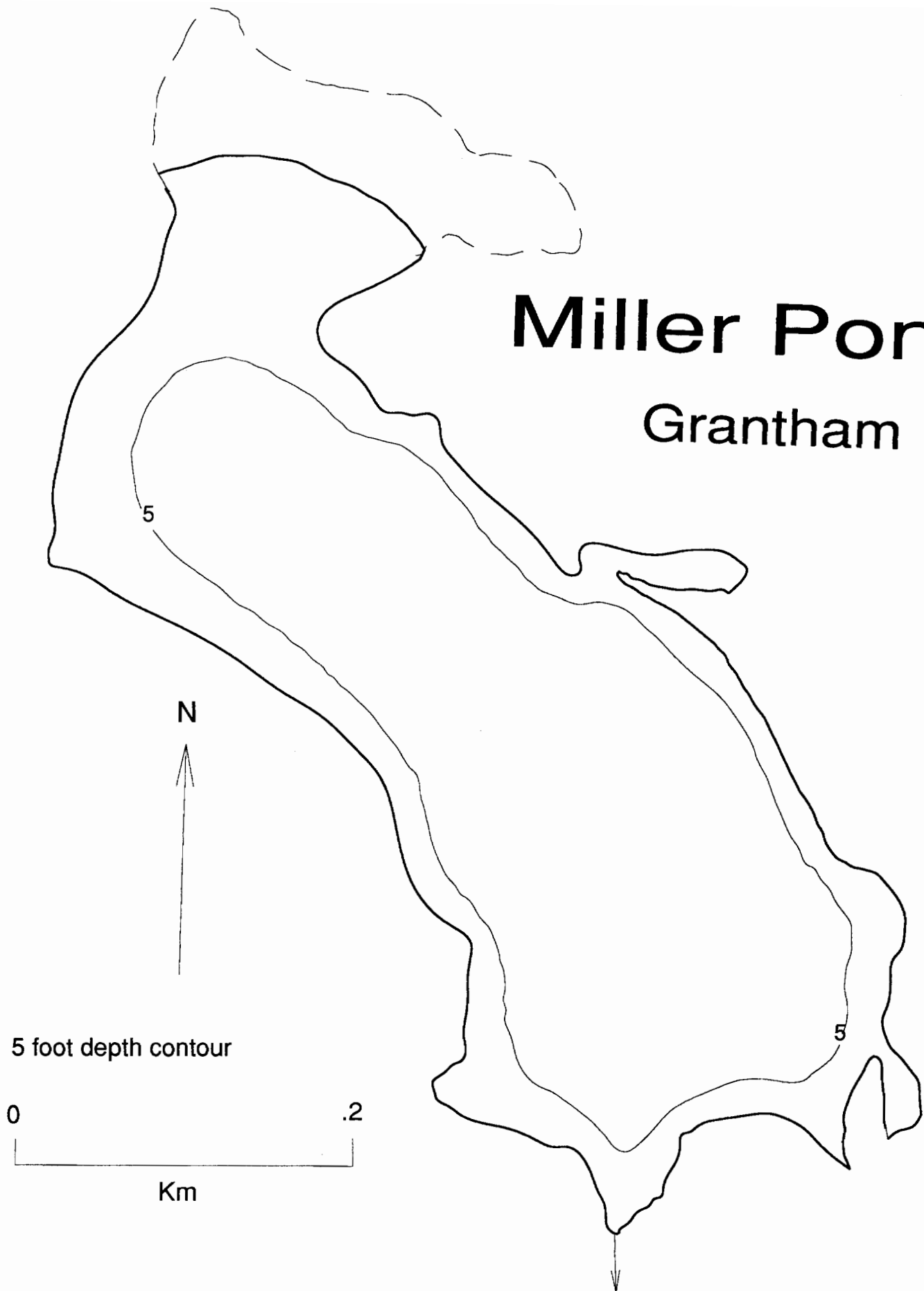
**	2	5	0	7	Meso.
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**COMMENTS:**

1. No public access or boat launch site to the pond.
2. Six cottages were located along the pond -- on the western shoreline. The dirt road along the western shoreline stopped at the northern end of the pond.
3. All the cottages appeared to have outhouses for waste disposal.
4. Dam appeared to be partially man-made with loose stones and partially a beaver dam.
5. Greens (85%) were the dominant class of wholewater plankton with the filamentous green alga Mougeotia (80%) the dominant genus.

# Miller Pond

## Grantham



[illegible]

TOWN: GRANTHAM  
WEATHER: CLEAR, SUNNY & WARM

[illegible]

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SECCHI DISK (m):    2.1 VOB      COMMENTS:
BOTTOM DEPTH (m):   2.1
TIME: 1210

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**\*Dissolved oxygen values are in mg/L**

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